

UNIVERSITI TEKNOLOGI MARA

**UTILISATION OF ROSUVASTATIN
IN HOSPITAL SERDANG: A RETROSPECTIVE
STUDY**

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for the degree of
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CONFIRMATION BY PANEL OF EXAMINERS

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AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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ABSTRACT

Statin is recommended as the first line therapy for dyslipidaemia given its significant benefits for patients with high cardiovascular risk. Intensive lipid control using statin will aid in the prevention of CHD complications. Availability of various statin to choose is not an assurance to achieve lipid target. Therefore, the study sets out to investigate the trends and utilisation and prescribing pattern of statin drug in Hospital Serdang. As this thesis is mainly concerned on rosuvastatin users, the aim of this study is intended to determine the clinical characteristic of patients, evaluate the effects on lipid profile as well to determine the factors affecting LDL goal attainment of among those who were on rosuvastatin. A retrospective, observational study data collection was done at Hospital Serdang whereby the lists of all patients from 1 January 2015 to 31 Mac 2015 were retrieved from the eHIS system. Lipid profiles were obtained at baseline and 6 months follow up. Logistic regression analysis was used to predict factors for achieving target lipid goals. Findings from this study reveal that the top prescribing pattern of statin in Hospital Serdang is simvastatin 54.46%, followed by atorvastatin (37.12%), lovastatin (6%), rosuvastatin (2.15%) and pravastatin (0.28%). A total of 102 patients (aged ≥ 18 years) prescribed with rosuvastatin were included in this study which consist of 81 males and 21 females (mean age : 56.40 [± 9.45]). The mean difference between pre and post LDL-C for rosuvastatin users (n=102) as well as patient who were prescribed with rosuvastatin as monotherapy (n=56) was significantly different ([95% CI- 0.018, 0.442; p=0.048] and [95% CI- 0.113, 0.704; p=0.008]). Only 38.2% of patients achieved the target LDL-C goal attainment. In addition, there are significant association between LDL-C goal attainment with LDL-C at baseline level as well as TC level and CHD risk (p<0.05). TC level at baseline was the significant predictors for LDL-C goal attainment (p<0.05). In conclusion, patients (n=102) undergoing rosuvastatin treatment in the present study were unable to achieve targeted LDL-C goal attainment specifically patient with high TC. As variations may exist in achieving therapeutic goal attainment, future research with larger population is needed to compare the effects of all statin in lipid profile.

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